

### Abstract of the Disclosure

A multi-beam color scanning device is provided with a multi-beam light source unit, a first polygonal mirror that deflects the plurality of light beams emitted by the multi-beam light source unit to scan in a horizontal scanning direction. The scanning beams pass through an  $f\theta$  optical system and are incident on a second polygonal mirror that deflects the light beams in a vertical scanning direction. The second polygonal mirror deflects the light beams by one line in the horizontal scanning direction at every horizontal scanning thereof. The light beams scan within a predetermined scanning area defined by deflection of the first and second polygonal mirrors. There is provided a light receiving unit that receives the plurality of light beams reflected by an object located within the predetermined scanning area. An operation system obtains a three-dimensional shape and color of the object based on the output of the light receiving unit.